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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,912	08/20/2001	Nghi Van Nguyen	05725.0593-00	4343

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EXAMINER
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ELHILO, EISA B

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/931,912	<b>Applicant(s)</b> NGUYEN ET AL.	
	<b>Examiner</b> Eisa B Elhilo	<b>Art Unit</b> 1751	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-131 is/are pending in the application.
- 4a) Of the above claim(s) 43-131 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1 This action is responsive to the appeal brief filed on December 23, 2004.

2 Upon further review and consideration the prosecution is reopened. Exparte prosecution  
is resumed.

3 Claims 43-131 are withdrawn for the reasons set forth in the previous office action  
mailed on 7/22/2003. Pending claims are 1-19 and 21-42.

New ground of rejection

#### *Claim Rejections - 35 USC § 102*

4 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the  
basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on  
sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-11, 18-19, 21, 25-26, 29, 32-34 and 37-41 are rejected under 35

U.S.C. 102(b) as being anticipated by Helioff et al. (US 4,793,994).

Helioff et al. (US' 994), teaches a hair treating compositions comprising ammonium  
hydroxide, a reducing agent of sodium bisulfite and a complexing agent of chelating agent as  
claimed in claims 1, 2, 40 (see col. 5, lines 15-31), wherein the hydroxide compound is sodium  
hydroxide or potassium hydroxide as claimed in claims 3 and 4 (see col. 5, line 57), wherein the  
hydroxide presents in the amounts of 1.1% which is within the claimed amount as claimed in  
claim 5 (see col. 5, line 22), wherein the composition comprises a reducing agent of ammonium  
thioglycolate as claimed in claims 7, 8 and 9 (see col. 5, line 10), wherein the composition  
comprises 0.8% of a reducing agent of potassium sulfite as an inorganic sulfite as claimed in

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claims 10 and 11 (see col. 5, line 11), wherein the composition comprising water as a solvent as claimed in claims 18-19 (see col. 5, line 31), wherein the complexing agent is chosen from chelating agent as claimed in claim 21 (see col. 5, line 23), wherein the composition comprises a sequestering agent chosen from citric acid as a monohydroxycarboxylic acid as claimed in claims 21, 25, 26 and 32-33 (see col. 5, line 21), wherein the complexing agent is chosen from phosphates as claimed in claim 29 (see col. 5, line 20), wherein the composition comprises two complexing agents (citric acid and chelating agent) as claimed in claim 37 (see col. 5, lines 21 and 23), wherein the composition further comprises surfactants and fragrance as claimed in claim 38 (see col. 5, lines 24-25), wherein the composition in the form of oil-water emulsion or cream as claimed in claim 39 (see col. 5, lines 40-42), wherein the composition is heat-activated as claimed in claim 41 (see col. 3, lines 51-52). Helioff et al. (US' 994) teaches all the limitations of the instant claims. Hence, Helioff et al., anticipates the claims.

***Claim Rejections - 35 USC § 103***

5        The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 22-23, 36 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helioff et al. (US 4,793,994).

Helioff et al. (US' 994) teaches an aqueous hair treating composition comprising 1.1% of ammonium hydroxide, a reducing agent of sodium bisulfite and a complexing agent of chelating agent as claimed in claim 1 (see col. 5, lines 15-31).

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The instant claims differ from the reference by optimizing the amount of the hydroxide compound in the composition.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of the hydroxide compound in the composition because the reference teaches a composition comprising 1.1% of ammonium hydroxide (see col. 5, line 22), and, thus, a person of the ordinary skill in the art would be motivated to optimize the amount of the hydroxide compound in the composition with the reasonable expectation of success in order to get the maximum effective amount and would expect such a composition to have similar properties to those claimed, absent unexpected results. Further, if range of prior art and claimed range do not overlap, obviousness may still exist if the range are close enough that one would not expect a difference in properties, *In re Woodruff* 16 USPQ 2d 1934 (Fed. Cir. 1990); *Titanium Metals Corp. V. Banner* 227 USPQ 773 (Fed. Cir. 1985); *In re Aller* 105 USPQ 233 (CCPA). Also a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.051.

With respect to claims 22-23, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate a composition with full dissociation because the reference teaches an aqueous hair treating composition comprising similar ingredients to those claimed and, thus, a person of the ordinary skill in the art would expect such a composition to have full dissociation as those claimed, absent unexpected results.

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With respect to claim 36, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate a composition comprising a complexing agent and a hydroxide compound to form a complexing agent-counter ion complex, because Helioff et al. (US' 994), teaches a composition comprising ammonium hydroxide and sodium hydroxide as hydroxide compounds (see col. 3, lines 65-67) and chelating agent as a complexing agent (see col. 5, line 24), and, thus a person of the ordinary skill in the art would expect such a composition to form the complexing-agent-counter ion complex as claimed and would expect such a composition to have similar properties to those claimed, absent unexpected results.

6        Claims 12-17, 27 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helioff et al. (US 4,793,994) in view of Au et al. (US 5,872,111).

The disclosure of Helioff et al. (US' 994) as described above, does not teach or suggest at least one cationic exchange component (thickeners) and the complexing agent chosen from disodium silicate and dipotassium silicate as claimed.

However, Helioff et al. (US' 994) teaches a hair treating composition comprising a complexing agent of chelating agent as claimed (see col. 5, lines 15-31).

Au (US' 111) in another analogous art teaches a shampoo composition comprising clay material such as aluminum silicate as claimed in claims 12-14 (see col. 15, lines 57), zeolites and aluminosilicates as claimed in claims 15-17 (see col. 20, line 37), tripotassium phosphates and sodium basic silicates (disodium silicates), and amino acids as claimed in claims 27 and 30-31 (see col. 10, line 64, col. 25, line 28 and lines 50-53).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of the

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primary reference by incorporating the complexing components as taught by AU with a reasonable expectation of success because the primary reference of Helioff et al. suggests the use of the complexing agents in the hair treating composition. Au (US' 111) as a secondary reference clearly teaches the use of these ingredients in the shampoo composition for rendering such compositions more formulatable, or aesthetically and/or cosmetically acceptable (see col. 14, lines 14-18), and, thus, a person of the ordinary skill in the art would be motivated to incorporate these ingredients in the hair treating composition to make the composition more formulatable and acceptable and would expect such a composition to have similar properties to those claimed, absent unexpected results.

7        Claims 24 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helioff et al. (US 4,793,994) in view of Mathews et al. (US 4,816,246).

The disclosure of Helioff et al. (US' 994) as described above, does not teach or disclose the specific species of the chelating agents as claimed.

However, Helioff et al. (US' 994) suggests the use of chelating agents in the hair treating composition (see col. 5, line 23).

Mathews et al. (US' 246) in analogous art of hair treating formulation, teaches a composition comprising chelating agents such as ethylene-diamine tetraacetic acid (EDTA) (see col. 4, line 37).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the primary reference of Helioff et al. (US' 994) by incorporating the chelating agent ethylene-diamine tetraacetic acid (EDTA) as taught by Mathews et al. (US' 246) to make such a composition. Such a modification

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would be obvious because Helioff et al., as a primary reference suggests the use of the genus chelating agents in the composition. Mathews et al., as a secondary reference clearly teaches the species ethylene-diamine tetraacetic acid (EDTA) in the hair treating composition, and, thus, a person of the ordinary skill in the art would be motivated to incorporate any species of chelating agents in the hair treating composition including the specific species ethylene-diamine tetraacetic acid (EDTA), and would expect such a composition to have similar properties to those claimed, absent unexpected results.

8 Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helioff et al. (US 4,793,994) in view of Pyles et al. (US' 2001/0008630 A1).

The disclosure of Helioff et al. (US' 994) as described above, does not teach or disclose the species monosodium glutamate as amino acid salt as claimed.

However, Helioff et al. (US' 994) suggests the use of amino acids salts in the hair treating composition (see col. 3, lines 65-67).

Pyles et al. (US' 630 A1) in other analogous art of hair treating formulation, teaches a composition comprising sodium glutamate as claimed (see page 5, claim 8).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the primary reference of Helioff et al. (US' 994) by incorporating the amino acid salt of sodium glutamate as taught by Pyles et al. (US' 603 A1) to make such a composition. Such a modification would be obvious because Helioff et al., as a primary reference suggests the use of the amino acid salts in the composition. Pyles et al., as a secondary reference clearly teaches the species of sodium glutamate as an amino acid salt in the hair treating composition, and, thus, a person of the



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ordinary skill in the art would be motivated to incorporate any salt of amino acids in the hair treating composition including the specific species of sodium glutamate, and would expect such a composition to have similar properties to those claimed, absent unexpected results.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo  
Patent Examiner  
Art Unit 1751

March 6, 2005